

We claim:

1. A full interchange urban road system comprising a road for motor vehicles and a traffic lane for non-motor vehicle arranged in essential a chessboard shaped road network with a double-layer road structure, in which one layer is motor way on the ground and  
5 another layer is footway at a suitable elevation over said motor way, wherein said footway is corresponding to the motor way, or said footways with proper width are located at each side above the two sides of said motor way and the two side footways are connected cross with a passageway, or the two kinds of roads are both provided in urban road system respectively.
- 10 2. A full interchange urban road system of claim 1, wherein said motor way comprises expressway and minor arterial, a separate fly-over type bridge is arranged at a location of the two expressways intersecting, said minor arterial performs the function of ramp
3. A full interchange urban road system of claim 1, wherein part of footway layer  
15 over an intersection of a collector street is constructed as ring pathway or aerial square.
4. A full interchange urban road system of claim 1, wherein said footways comprises a sidewalk and a traffic lane for non-motor vehicles provided at the same level.
5. A full interchange urban road system of claim 1, wherein a turnaround passageway is designed at a location of or more than two expressways intersecting or under a separate  
20 fly-over type bridge of said expressways.
6. A full interchange urban road system of claim 2, wherein a minor arterial is provided between each two parallel said expressways as a ramp for them and as a passageway leading to a subzone way.
7. A full interchange urban road system of any one of claim 1-6, wherein a first floor  
25 layer of buildings on the ground and beside the two side of road are a aerial layer that are used for parking area, urban forestation, construction for means of transportation, as well as circumnavigating of vehicle under emergency; said footways are connected with the building roof directly, and said aerial layer is used for parking.
8. A full interchange urban road system of any one of claim 1-6, wherein a U-turn  
30 road or a special ramp is provided near a branch road which is located at the boundary of city and in the city, or a separate fly-over type bridge for left turn is designed at a branch road of said expressway, or a branch road is provided on the minor arterial.
9. A full interchange urban road system of any one of claim 1, wherein latticework of said chessboard shaped road network is changeable in form, and the road is linear or  
35 curved road.
10. A traffic method of using the full interchange urban road system of claim 1-9 comprising a expressway and a minor arterial for constituting a motor way, a separate type fly-over bridge arranged at a location said two expressways intersecting, vehicles going straight ahead or turning to the travel side along the travel direction on the expressway,  
40 vehicles only turning left on the expressway in a country or region where the traffic keeps to the left, and vehicles only turning right along the travel direction on the expressway at a

country or region where the traffic keeps to the right, wherein said minor arterial performing the function of ramp.